

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An expression cassette comprising a promoter operably linked to a heterologous polynucleotide sequence, or a complement thereof, encoding a LEC1 polypeptide, comprising a subsequence at least 80% identical to the B domain of SEQ ID NO:2, wherein the polynucleotide sequence is heterologous to any element in the expression cassette, wherein the subsequence comprises the sequence MPIANVI (SEQ ID NO:5), and wherein the polynucleotide modulates embryo development when the polynucleotide is expressed in a plant.
2. (Original) The expression cassette of claim 1, wherein the B domain comprises a polypeptide sequence between about amino acid residue 28 and about residue 117 of SEQ ID NO:2.
3. (Original) The expression cassette of claim 1, wherein the B domain comprises a polypeptide sequence with an amino terminus at amino acid residues 28-35 and a carboxy terminus at amino acid residues 103-117 of SEQ ID NO:2.
- 4.-8. (Canceled)
9. (Original) The expression cassette of claim 1, wherein the promoter is a constitutive promoter.
- 10.-20. (Canceled)
21. (Currently amended) An isolated nucleic acid or complement thereof, encoding a LEC1 polypeptide comprising a subsequence at least 80% identical to the B domain of SEQ ID NO:2, wherein the subsequence comprises the sequence MPIANVI (SEQ ID NO:5), with the proviso that the nucleic acid is not clone MNJ7 (Genbank Accession No. AB025628), wherein the LEC1 polypeptide modulates embryo development when expressed in a plant.

22. (Original) The isolated nucleic acid of claim 21, wherein the B domain comprises a polypeptide sequence with an amino terminus at amino acids 28-35 and a carboxy terminus at amino acids 103-117 of SEQ ID NO:2.

23.-27. (Canceled)

28. (Original) The isolated nucleic acid of claim 21, wherein the nucleic acid further comprises a promoter operably linked to the LEC1-encoding nucleic acid.

29. (Original) The isolated nucleic acid of claim 29, wherein the promoter is a constitutive promoter.

30.34 (Canceled)

35. (Previously amended) A host cell comprising an expression cassette according to any of claim 1 or a nucleic acid molecule according to claim 21, wherein the expression cassette or nucleic acid molecule is flanked by a heterologous sequence.

36. (Original) The host cell of claim 35, comprising an expression cassette of claim 1.

37.-38. (Canceled)

39. (Original) The host cell of claim 35, comprising a nucleic acid molecule of claim 21.

40.-41. (Canceled)

42. (Original) A method of introducing an isolated nucleic acid into a host cell comprising:

(a) providing an expression cassette according to any of claim 1 or an isolated nucleic acid according to claim 21; and

(b) contacting the expression cassette or nucleic acid with the host cell under conditions that permit insertion of the nucleic acid into the host cell.

43. (Original) The method of claim 42, providing the expression cassette of claim 1.

44.-45. (Canceled)

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46. (Original) The method of claim 42, providing the nucleic acid of claim 21.

47. (Currently amended) A method of modulating embryo development in a plant, the method comprising,

introducing into the plant an expression cassette containing a plant promoter operably linked to a heterologous LEC1 polynucleotide, the heterologous LEC1 polynucleotide encoding a LEC1 polypeptide comprising a subsequence at least 80% identical to the B domain of SEQ ID NO:2, wherein the subsequence comprises the sequence MPIANVI (SEQ ID NO:5); and

detecting a plant with modulated embryo development.

48. (Original) The method of claim 47, wherein the LEC1 polynucleotide encodes SEQ ID NO:2.

49. (Original) The method of claim 48, wherein the LEC1 polynucleotide is SEQ ID NO:1.

50.-53. (Canceled)

54. (Previously Amended) The method of claim 47, wherein the detecting step comprises detecting the induction of embryonic characteristics in a plant.

55. (Previously Amended) The method of claim 47, wherein the detecting step comprises detecting the induction of seed development.

56.-57. (Canceled)

58. (Original) A transgenic plant cell or transgenic plant comprising the recombinant expression cassette of claim 1.

59.-62. (Canceled)

63. (Original) The transgenic plant cell or transgenic plant of claim 58, wherein the promoter is a constitutive promoter.

64.-68. (Canceled)

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69. (Original) A plant which has been regenerated from a plant cell according to 58.
70. (Previously added) The expression cassette of claim 1, wherein the B domain comprises a polypeptide sequence between amino acid residue 28 and residue 117 of SEQ ID NO:2.
71. (Previously added) The isolated nucleic acid of claim 21, wherein the B domain comprises a polypeptide sequence between amino acid residue 28 and residue 117 of SEQ ID NO:2.
72. (Previously added) The host cell of claim 35, wherein the B domain comprises a polypeptide sequence between amino acid residue 28 and residue 117 of SEQ ID NO:2.
73. (Previously added) The method of claim 47, wherein the B domain comprises a polypeptide sequence between amino acid residue 28 and residue 117 of SEQ ID NO:2.
- 74-77. (Canceled)